Application Serial No.: 10/716,862

Reply to Non-Final Office Action Dated: August 9, 2005

AMENDMENT TO CLAIMS

Please AMEND claims 2, 6-9, 14, 18-20 and 24 as shown below.

Please ADD new claims 27-36 as shown below.

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

 (Original) A device for reducing the growth of a bone, the device comprising:

a power source for generating a current, wherein the current is effective to reduce the growth of a bone; and

at least one electrode in electrical communication with the power source, wherein said the at least one electrode is adapted to apply the current to a predetermined location of the bone.

- 2. (Currently amended) The device of claim 1 further comprising wherein more than one electrode is in electrical communication with the power source.
- 3. (Original) The device of claim 1 wherein the at least one electrode comprises a threaded portion.
- 4. (Original) The device of claim 1 further comprising a controller in electrical communication with the power source and the at least one electrode, wherein the controller distributes a predetermined current to the at least one electrode.

Application Serial No.: 10/716,862 Reply to Non-Final Office Action Dated: August 9, 2005

5. (Original) The device of claim 4 wherein the controller regulates the frequency and duration the current is distributed to the at least one electrode.

- 6. (Currently amended) The device of claim 4 wherein the controller regulates the an amount of the current applied to each of the at least one electrode.
- 7. (Currently amended) The device of claim 4 wherein the controller programmably regulates the amount of the current applied to each of the at least one electrode, and the frequency and duration the current is applied to each of the at least one <u>-electrodes</u> electrode.
- 8. (Currently amended) The device of claim 1 wherein the power source and the at least one electrode delivers a current of is at least 50 µA.
- 9. (Currently amended) The device of claim 1 comprising at least two electrode electrodes and wherein the current delivered to the at least two electrodes is different.
- 10. (Original) A method for reducing the growth of a bone, comprising applying bone growth reducing electrical current to at least a portion of the growth plate of a bone, wherein the current is effective to reduce the growth of the bone in the applied region.
- 11. (Original) The method of claim 10 wherein the bone growth reducing electrical current is effective to arrest the growth of the bone in the applied region.

Application Serial No.: 10/716,862 Reply to Non-Final Office Action Dated: August 9, 2005

12. (Original) The method of claim 10 wherein the bone growth reducing electrical current is effective to arrest the growth of the entire bone.

- 13. (Original) The method of claim 10 further comprising positioning at least one electrode near the growth plate of the bone, wherein the bone growth reducing electrical current is applied to the growth plate through the at least one electrode.
- 14. (Currently amended) The method of claim 10 further comprising:

 positioning at least one electrodes electrode near the growth plate of the bone,
 wherein the bone growth reducing electrical current is applied to the growth plate
 through the at least one electrode;

providing a power source and controller in electrical communication with the at least one electrode, wherein the power source generates the bone growth reducing current and the controller regulates the amount of the current applied to each of the at least one electrode; and

monitoring the change in growth of the bone.

- 15. (Original) The method of claim 14 further comprising:
 determining an amount of correction for the bone; and
 removing the power source when the amount of correction has been achieved.
- 16. (Original) The method of claim 10 wherein the bone growth reducing electrical current is at least 50 μ A.
- 17. (Original) The method of claim 13 wherein the at least one electrode is positioned in the growth plate.

Application Serial No.: 10/716,862

Reply to Non-Final Office Action Dated: August 9, 2005

18. (Currently amended) A method for correcting the curvature of the <u>a</u> spine, comprising the steps of:

positioning at least one electrode at a portion of a vertebrae<u>vertebra</u> near the <u>an</u> outside of a curve of the spine; and

applying a bone growth reducing current to the portion of the <u>vertebraevertebra</u>, wherein the current is effective to reduce the growth of the <u>vertebraevertebra</u> at the outside of the curve without reducing growth of the <u>vertebraevertebra</u> near the <u>an</u> inside of the curve.

19. (Currently amended) The method of claim 18, further comprising at least one of the steps of:

determining the <u>an</u> amount of correction for the curvature of the spine; monitoring the change in curvature of the spine; and

removing the at least one electrodes <u>electrode</u> from the <u>vertebraevertebra</u> when the amount of correction for the curvature of the spine has been achieved.

20. (Currently amended) The method of claim 18, further comprising the steps of:

positioning at least two electrodes on at the portion of the vertebrae vertebrae along near the outside of the curve of the spine; and

providing a power source and controller in electrical communication with the at least two electrodes, wherein the power source generates the bone growth reducing current and the controller regulates the <u>an</u> amount of the current applied to each of the at least <u>one electrodetwo electrodes</u>.

Application Serial No.: 10/716,862 Reply to Non-Final Office Action Dated: August 9, 2005

- 21. (Original) The method of claim 20 wherein the controller regulates the frequency and duration of the current applied to each of the at least two electrodes.
- 22. (Original) The method of claim 20 wherein the amount of current applied to two or more electrodes is different.
- 23. (Original) The method of claim 20 further comprising the step of: programming the controller to apply the amount, frequency, and duration of the current to each of the at least two electrodes.
- 24. (Currently amended) The method of claim 18 further comprising the steps of:

providing at least one second electrode on <u>at</u> a portion of the <u>vertebraevertebra</u> along <u>near</u> the inside of the curve of the spine; and

applying a bone growth stimulating current to the at least one <u>second</u> electrode.

- 25. (Original) The method of claim 18 wherein the at least one electrode is positioned in a growth plate.
- 26. (Original) The method of claim 18 wherein the at least one electrode is positioned near a growth plate.
- 27. (New) The device of claim 9 wherein the current delivered to the first electrode is at least 50 μ A and the current delivered to the second electrode is 35 μ A.

Application Serial No.: 10/716,862 Reply to Non-Final Office Action Dated: August 9, 2005

- 28. (New) The method of claim 22 wherein the current delivered to one of the electrodes is at least 50 μA and the current delivered to another one of the electrodes is 35 μA .
- 29. (New) The method of claim 24 wherein the bone growth reducing current is at least 50 µA and the bone growth stimulating current is under 20 µA.
- 30. (New) The method of claim 18 wherein the vertebra is located at substantially the apex of the curve.
- 31. (New) The method of claim 30, further comprising the step of:

 positioning at least one electrode in a first vertebra disposed adjacent to the

 vertebra at the apex of the curve such that the at least one electrode in the first vertebra is

 positioned at a portion of the first vertebra near the outside of the curve.
- 32. (New) The method of claim 31, further comprising the step of:

 positioning at least one electrode in a second vertebra disposed adjacent to the

 vertebra at the apex of the curve such that the at least one electrode in the second vertebra

 is positioned at a portion of the second vertebra near the outside of the curve.
- 33. (New) The method of claim 32, further comprising the step of:
 applying more current to the vertebra at the apex of the curve than to at least one of
 the first vertebra and the second vertebra.
- 34. (New) The method of claim 10, wherein the bone continues to grow in a region where the current is not applied.

- 35. (New) The method of claim 10 wherein the current is at least 35 μA .
- 36. (New) The device of claim 1 wherein the current is at least 35 μ A.